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P6915

1922 BUREAU OF PLANT INDUSTRY

PLANT IMMIGRANTS

No. 197 SEPTEMBER, 1922

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Foreign Seed and Plant Introduction

EXPLANATORY NOTE

This circular is made up principally of notes received from agricultural explorers, foreign collaborators, and correspondents, concerning the more important plants which have been received recently by the Office of Foreign Seed and Plant Introduction. It also contains reports on the behavior of plants which have been introduced in previous years.

Descriptions appearing here are revised and later published in the Inventory of Seeds and Plants Imported,--the permanent record of plant introductions made by this Office.

Plant Immigrants should be considered merely an ANNOUNCEMENT OF THE ARRIVAL OF PLANT MATERIAL. As a rule all material is propagated before being distributed; this may require several years.

The Annual Catalogue of New Plant Introductions describes briefly the plants available for distribution. Application for seeds or plants listed in Plant Immigrants may be sent at any time, however, and will be filed in the order of their receipt. When material is ready for distribution, these requests will be given first attention; if their number is sufficient to exhaust the available supply of a given species, it will not be included in the Annual Catalogue.

Plant breeders and experimenters who desire plants not available in this country are invited to correspond with this Office which will endeavor to secure the required material through its agricultural explorers, foreign collaborators, or correspondents.

DAVID FAIRCHILD
Agricultural Explorer in Charge,
Office of Foreign Seed and Plant Introduction.

Issued Oct. 25, 1922. Washington, D. C.

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Callitris whytei (Pinaceae), 55602. From Mount Silinda, Southern Rhodesia. Seeds presented by W.L. Thompson, American Board of Missions. "Native cedar of this region. These seeds are from trees in our own grounds." (Thompson.)

The 'Milanji cypress' was orginally found at an altitude of 10,000 feet on Mount Milanji, in Nyasaland, by Alexander Whyte. It is a magnificent tree reaching a height of 140 feet, sometimes with a clear straight trunk for 90 feet and a diameter of 5½ feet at 6 feet from the base. The pale reddish timber is of excellent quality and easily worked. The bark on old trees is of great thickness. These fine trees are rapidly disappearing before forest fires, only those in damp gorges surviving. (Adapted from Transactions of the Linnean Society, 2d ser., vol. 4, p. 60; and Gardeners' Chronicle, 3d ser., vol. 37, p. 18.)

Ceratonia siliqua (Caesalpiniaceae), 55727. **Carob.** From Bari, Italy. Budwood presented by Dr. E. Pantanelli, director, Agricultural Experiment Station. "'Amele.' This is considered the best variety of carob cultivated in this province (Bari); it may be the kind with large sweet pods which has been reported to you from this region." (Pantanelli.)

Cyrtostachys lakka (Phoenicaceae), 55579. **Palm.** From Singapore, Straits Settlements. Seeds presented by I. Henry Burkill, superintendent, Botanic Gardens. A stately and elegant palm, native to the East Indies, with a slender spineless stem crowned by a cluster of boldly arched leaves 3 to 4 feet in length. The fruits are elongate egg shaped and about half an inch long. (Adapted from Beccari, Annales du Jardin Botanique de Buitenzorg, vol. 2, p. 141, and from Bailey, Standard Cyclopedia of Horticulture, vol. 2, p. 947.)

J.F. Rock recommends this as a handsome ornamental plant, probably suitable for cultivation in southern Florida. It is doubtful if it will withstand heavy frosts.

Dioscorea alata (Dioscoreaceae), 55712. **Greater yam.** From Bridgetown, Barbados, British West Indies. Tubers presented by John R. Bovell, Director of Agriculture. "'Barbados Red.' The tuber has a purple inner skin and white flesh usually tinged or mottled with purple. The vine is 4-angled, with rather prominent maroon wings. The leaves are opposite, broadly ovate, cordate,

acuminate;veins maroon;sinus deep and narrow;petioles maroon at base and apex. In the cooked yam the purple color is pale, and the flesh is mealy and of good flavor. The tubers often weigh several pounds each and are usually somewhat cylindrical. This is a standard variety in the West Indies and should be a good market yam for this country." (R. A. Young.)

Fragaria roseiflora (Rosaceae), 55726. **Strawberry**. From Chene-Bourg, near Geneva, Switzerland. Seeds purchased from H. Correvon, Floraire Nursery. This is very closely allied to *Fragaria vesca*, from which it is distinguished by its round, uniformly pink petals and its roundish depressed fruits. It is found wild on the slopes of the Vosges Mountains in Alsace. (Adapted from Bulletin de la Société de France, vol. 18, p. 92.)

Introduced for experiments in strawberry breeding.

Hordeum vulgare pallidum (Poaceae), 55714. From Algiers, Algeria. Seeds presented by Dr. L. Trabut. "'Trabut.' A very hardy variety selected from the barleys of North Africa." (Trabut.)

Kennedya monophylla (Fabaceae), 55601. From Richmond, Victoria. Seeds presented by F. H. Baker. An ornamental Australian vine with alternate smooth leaves and a profusion of blue flowers borne in stalked racemes. The long carrot-shaped, somewhat woody root is called "sarsaparilla" by the natives, and is used in infusion as a substitute for that root. (Adapted from Lindley, Treasury of Botany, vol. 1, p. 569.)

Lycopersicon esculentum (Solanaceae), 55591. **Tomato.** From Buenos Aires, Argentina. Seeds presented by D. S. Bullock, agricultural commissioner, Bureau of Markets and Crop Estimates, U. S. Department of Agriculture. "Seeds from blight-resistant plants of 'Parana' grown at the Tucuman Experiment Station in 1921. This is the variety most extensively planted in Tucuman, especially in the Lules region. It is generally regarded as the most blight-resistant variety but my own experience has led me to the conclusion that it is not completely resistant, although there are always a number of plants which have not suffered at all when the rest of the plants have died from the disease." (E. F. Schultz.)

Introduced for the use of specialists in breeding blight-resistant varieties.

Magnolia campbellii (Magnoliaceae), 55723. **Magnolia.** From Darjiling, India. Seeds presented by G. H. Cave, curator, Lloyd Botanic Garden. A beautiful, deciduous magnolia from the Himalayas, where it ascends to 8,000 feet above sea level. It reaches a height of 80 feet, has very dark bark, large elliptical dark-green leaves, and white to purple flowers 10 inches in diameter. This magnolia has flowered freely in southern France and Italy. (Adapted from Curtis's Botanical Magazine, pl. 6793.)

Medicago sativa (Fabaceae), 55569-55571. **Alfalfa.** From Cuenca, Ecuador. Seeds presented by Dr. Federico Malo. These introductions from different places in Ecuador are made in the hope of securing new and valuable strains of alfalfa from the Andean region of South America. Quoted notes by Dr. Malo.

55569. "From Dr. José A. Avilez, town of Guano."

55570. "Purchased from Paula Iza, who brought it from Cuchibamba, near Ambato."

55571. "Obtained from Antonio Moyano, and said to have been grown at Guanando. Alfalfa grown in this region is considered especially good."

Musa sp. (Musaceae), 55592 and 55593. **Banana.** From Kisantu, Belgian Kongo. Seeds presented by Père J. Gillet, S.J., Jardin d'Essais de Kisantu. Quoted notes by Père Gillet.

"These bananas are handsomer and probably more hardy than *Musa ensete*; they grow in the mountains of Ruanda at altitudes of 6,500 feet or more."

55592. "A variety with white nerves."

55593. "A variety with red nerves."

Phoenix sp. (Phoenicaceae), 55613. **Palm.** From Nice, France. Seeds presented by Dr. A. Robertson Proschowsky. "(No. 3.) This Phoenix hybrid is a small plant, which develops shoots from the base, and is highly ornamental. It has proved quite hardy here, withstanding the severe frost of 1920 (21° F.), the lowest temperature since 1829." (Proschowsky.)

Phyllostachys sp. (Poaceae), 55713. **Bamboo.** From Tangsi, Chekiang, China. Collected by the late Frank N. Meyer, Agricultural Explorer, in 1907. Now numbered for convenience in distribution. "A small-growing variety not over 10 feet in height, forming dense clumps. The small wiry stems make excellent plant stakes and

small fishing rods. The plant is quite hardy, withstanding freezing temperatures." (Peter Bisset.)

Prinsepia utilis (Amygdalaceae), 55719. From Likiang, Yunnan, China. Seeds collected by J. F. Rock, Agricultural Explorer of the Bureau of Plant Industry. "(No. 3281. Lashih Pa. May 10,1922.) A spiny shrub of great ornamental value, which grows on limestone soil at altitudes of 8,000 to 10,000 feet north of Talifu. In December and January the pendent branches bear a great profusion of white flowers. A cooking oil is expressed from the seeds which are gathered by the Chinese and native tribes." (Rock.)

Prunus armeniaca (Amygdalaceae),55725. **Apricot**. From Algiers, Algeria. Seeds presented by Dr. L. Trabut. "A native apricot known as louz;the tree is very productive and the fruit excellent. This tree is cultivated in a subarid region at M'Sila." (Trabut.)

Prunus serrulata (Amygdalaceae),55587. **Flowering cherry**. From Yokohama, Japan. Seeds purchased from the Yokohama Nursery Co., Ltd.

Forma *lannesiana*. A variety of Japanese cherry known as Mazakura (synonym, Dai-Sakura), used in Japan as a stock. Prof. Yugo Hoshino,of the Tohoku Imperial University at Sapporo, is quoted as follows in Hedrick's Cherries of New York, p. 75: "In the northern part of Japan proper (main island),it is a common practice to graft European cherries on a special kind of Japanese cherry. This cherry has a peculiar character which fits it for propagation; namely, it roots very easily either from cuttings or by mound layering. It is grown by nurserymen only and is called 'Dai-Sakura.' It has a somewhat dwarfing influence on scions and hastens their fruiting age."

Prunus spp. (Amygdalaceae), 55715-55717. From Jamaica Plain, Mass. Seeds presented by Dr. C. S. Sargent, Arnold Arboretum.

55715. *Prunus serrulata pubescens*. A tree up to 55 feet in height, with a trunk sometimes 7 feet in circumference and leaves with pale-green lower surfaces. The white or pink single flowers are usually about four-fifths of an inch in diameter. This variety has the widest distribution of any of the Japanese cherries,and flowers about two weeks later than *P. serrulata spontanea*, from which variety it differs chiefly in the

slight hairiness of the leaves. (Adapted from Wilson, Cherries of Japan, p. 31.)

55716. *Prunus serrulata sachalinensis*. **Sargent's cherry.** This variety is very similar to *P. serrulata pubescens*, except that the leaves are not hairy and the flowers, which are pink or rose colored, rarely white, are usually a little more than an inch in diameter. It is the handsomest of all the wild cherries of eastern Asia, and is the parent of several of the finest double-flowered Japanese cherries. (Adapted from Wilson, Cherries of Japan, p. 35.)

55717. *Prunus serrulata spontanea*. In Japan this variety is a common wild tree in the woods and thickets from Kagoshima in the south to the Nikko region in the north, where it forms a tree over 75 feet in height with a trunk 15 feet in circumference. In habit and color of flowers this variety agrees closely with the northern *Prunus serrulata sachalinensis*; the flowers are white or pink, and a little less than an inch in diameter. (Adapted from Wilson, Cherries of Japan, p. 28.)

Prunus sp. (Amygdalaceae), 55720. **Cherry.** From Likiang, Yunnan, China. Seeds collected by J. F. Rock, Agricultural Explorer of the Bureau of Plant Industry. "(No. 3256. May 9, 1922.) A wild cherry which forms a large spreading tree 50 feet high with a trunk up to 2 feet in diameter. It grows at 8,500 feet altitude in forests beyond Chinho. It bears large numbers of small yellow fruits, and should be a fine tree for stock purposes." (Rock.)

Rosa sp. (Rosaceae), 55721. **Rose.** From Yunnan, China. Seeds collected by J.F. Rock, Agricultural Explorer of the Bureau of Plant Industry. "(No. 3238. Lashih Pa Valley. May 10, 1922.) A fine climbing rose which grows in great profusion at 8,000 feet altitude near Likiang. It is a prolific bloomer, bearing large corymbs of flowers which are yellow at first but white when fully opened." (Rock.)

Notes on Behavior of Previous Introductions.

Amygdalus persica (Amygdalaceae), 33219. **Vainqueur peach.** From Granada, Spain. The following notes have been received.

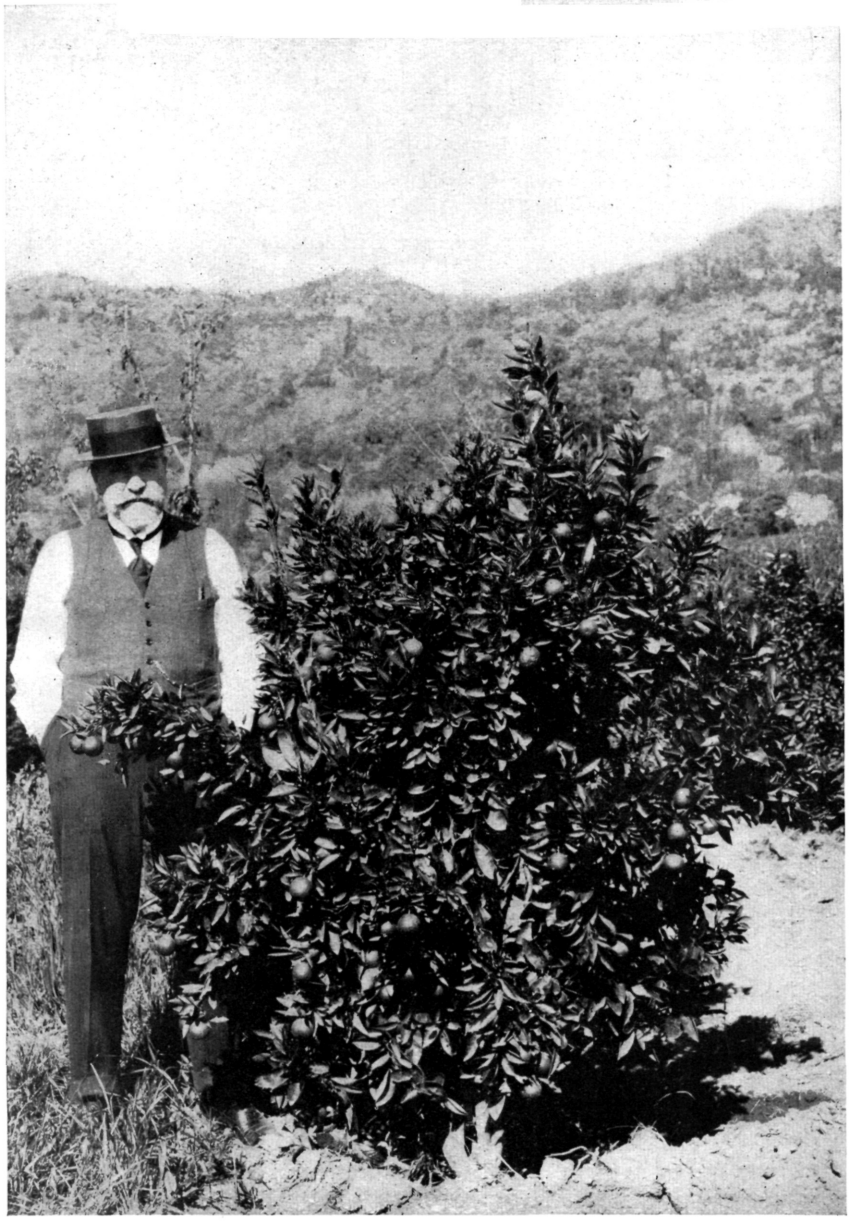
From Dr. John E. Cannaday, Charleston, W. Va., August 17, 1922: "The Vainqueur peach which you sent me three years ago has made a very fair growth but

shows a tendency toward making a dwarf tree. It bore its first crop this season; the fruits were slightly below medium size, with a very pink cheek. The flesh was pink all the way to the stone. The quality is very good for an early peach, and the ripening period from June 15 to June 25."

From George J. Ratliffe,Farm Superintendent, San Antonio Experiment Farm, San Antonio,Texas, September 20, 1922: "Four trees were received in 1914 and 1915. In regard to the trees received in 1914,the following data are available:- The well-colored fruits are large, nearly round, about 2 inches in diameter, yellowish green tinged with pink, and clingstone; skin medium thick; flesh greenish white, subacid; quality fair; season of ripening last part of May."

From M. Sharpe, Vacaville, Calif., September 21, 1922: "The Vainqueur peach has fruited with me for several years. It is one of the earliest peaches I have fruited and the quality is very good for such an early variety. It colors well and is quite prolific, and will make a good commercial peach. I am trying to get nurserymen interested in it."

From Wilbur S. Tupper, San Leandro, Calif., August 14,1922: "A very vigorous grower, with dense foliage and unusually large leaves; the glands are numerous and kidney shaped. The flowering period is midseason, and the flowers are large. The fruit is medium sized,somewhat oblong,suggesting the Elberta but slightly flattened; in color it is yellow,streaked or splashed with red, and is very handsome. The flesh is white, freestone,and fairly firm. The skin has little fuzz, and peels readily. The flavor is sweet and the quality is very good: apparently this is the best of the very early peaches. It is not stringy like the Mayflower, which ripens about the same time (June 25 at San Leandro). The general characteristics of this variety lead me to believe that it is a mixture of the North China and Persian types."



A NEW DWARF ORANGE FROM CHILE.

(*Citrus sinensis* (L.) Osbeck, S. P. I. No. 54651.)

The Capuchin orange, a dwarf form of the common sweet orange, is cultivated in the vicinity of Santiago de Chile, where it may have originated. The tree bears heavy crops of fruit while still quite small and gives promise of being useful in the United States as a house plant, as well as for dooryards and other places where an ornamental fruiting plant is desired. The oranges are of excellent quality; they are about 2 inches in diameter, with thin skin, few seeds, and abundant juice of much the same flavor as the Washington Navel. Standing by the tree shown above is Don Salvador Izquierdo, one of the principal Chilean nurserymen. (Photographed by Wilson Popenoe, at Cascada del Salto, near Santiago de Chile, October 6, 1921; P18883FS.)

IN THE FLOWER MARKET OF SANTIAGO DE CHILE.

The love of flowers seems to be inherent in South Americans to a greater degree than in many other peoples. In some of the larger cities of South America there are excellent flower markets, where the choicest European varieties, as well as many native species, are offered for sale. Because of the favorable soil and climate of central Chile, Santiago, the capital of that country, offers an excellent display of cut flowers at nearly all times of the year. They are sold along the sidewalk of the Alameda, beneath the shade of oriental planes, maples, and other temperate-zone ornamental trees. (Photographed by Wilson Popenoe, Santiago de Chile, October 3, 1921; P18848FS.)

A PROMISING HYBRID PEAR
S.P.I. No. 55805.

"The late Dr. Walter Van Fleet, prior to his entering the United States Department of Agriculture in 1909, conducted at his home in Little Silver, New Jersey, extensive work in plant breeding. In 1907 he inaugurated some work in the breeding of pears, the main object being to secure, if practicable, pears more resistant to fire blight than those commonly grown. When Doctor Van Fleet took up his work in the Office of Foreign Seed and Plant Introduction in 1909, he brought with him from his home in New Jersey many young plants, the result of his breeding work. Most of these were sent to the Garden at Chico, California, among them a number of cross-bred seedling pears. From time to time these pears have come into fruit and their characters have been noted. The pear here described is one of the most promising so far developed as a result of Dr. Van Fleet's work. The two original trees have been growing for nearly ten years at Chico. They are strong, fast growers, regular and prolific bearers, and have never shown any evidence of fire blight. Following is a detailed description of the pear:

S. P. I. 55805. *Pyrus serotina* x *communis*.

"Grown at the Plant Introduction Garden, Chico, California, under P. I. G. No. 6583. A hybrid pear raised by the late Dr. Walter Van Fleet at Little Silver, New Jersey, and presented to the Plant Introduction Garden in 1909. Promising as a blight-resistant cooking and preserving pear for sections where fire blight is destructive.

"Origin. Little Silver, N. J. A hybrid probably between Golden Russet, an oriental pear, and one or more of the *P. communis* types. Medium to large, roundish, obovate; skin golden, covered with numerous small, round dots; stalk long, stout; cavity around stalk quite shallow or none at all; basin at the calyx end more or less abrupt, deep, russet; flesh whitish, sweet, slightly subacid, granular; core medium; seeds few, large; not gritty.

"A handsome golden colored pear which

> when properly ripened makes a fine baking and preserving fruit. The trees are strong and vigorous with large, thick, glossy leaves. The two original trees have been grown at Chico for more than ten years and no trace of blight has appeared. Mr. J. E. Morrow, Superintendent of the Chico Garden, who has watched this pear carefully for a number of years, says that it is a splendid cooking pear and that it tastes, after being cooked, something like pineapple. He further says that, owing to its extreme vigor, size, hardiness, immunity to blight, and heavy cropping qualities, he believes the pear has much promise. He regards it as much better than Kieffer or LeConte, and is of the opinion that it should be thoroughly tested out, especially in the Southern States.

"We have tested the pear as a baking and preserving fruit. When properly ripened it bakes quickly, and when cut in halves, cored, and cooked with a teaspoonful of sugar, a small bit of butter, and a sprinkling of cinnamon to each piece, the fruit is delicious. In preserving, the fruit remains firm, assuming a clear crystalline appearance, with a rich pear taste." (B. T. Galloway.)

NAMES OF GUATEMALAN AVOCADOS.

Wilson Popenoe.

Many of the avocados introduced from Guatemala in 1916-17 have come into bearing in California and Florida. Several of the varieties are already in the trade, and are being planted commercially.

The Office of Foreign Seed and Plant Introduction has received numerous inquiries concerning the meaning of the names given to these varieties. In U. S. Department of Agriculture Bulletin No. 743, "The Avocado in Guatemala," the statement was made: "In order to distinguish these avocados from varieties originated in the United States, names taken from one of the Maya dialects have been given them. Inasmuch as they come from the Maya territory, this may not be inappropriate."

The Maya race occupied Guatemala and Yucatan in prehistoric times, and there developed the most remarkable indigenous civilization of the western hemisphere.

The Mayas particularly excelled in architecture and art, and they were the only race in the new world to develop a written language. Of their numerous deities, Itzamna, the creator of mankind, was held to be the chief, and Yum Kaax, the Maize God, who is portrayed as having for his headdress a sprouting ear of corn surrounded by leaves, symbolic of growth, may well be called the god of agriculture.

From the ancient Maya stock have sprung the twenty or more tribes which today occupy Guatemala. They are agricultural peoples, intelligent and industrious. The avocado is one of their favorite foods, and is called, in various dialects, *oh*, *okh*, *un*, *on*, and so forth.

In selecting the names for the varieties introduced into the United States from Guatemala, an effort was made to choose words which would not be unreasonably difficult of pronunciation, and which would, in as many cases as possible, have appropriate meanings. Several were named for Maya deities; one for an Indian who assisted in the work of introducing them; and in half a dozen instances, appropriate names were chosen from the Kekchí dialect of the Alta Vera Paz, an important avocado-growing region of northern Guatemala. Below is the list, with a word of explanation concerning the derivation of each name:

ITZAMNA (No. 2), S.P.I. No 55736. Named for the chief deity of the Maya Pantheon. Itzamna was considered the father of all other gods, and the creator of mankind. He was the founder of the Maya civilization, the inventor of writing and books, and the great healer.

LAMAT (No. 3), S.P.I. No. 43476. This name is that of one of the twenty days of the Maya calendar. The hieroglyph which represents it shows, presumably, the setting sun. It is also connected with the planet Venus in some way.

KANOLA (No. 6), S.P.I. No. 43560. This word is used in the Kekchí language of northern Guatemala to mean "sweetheart." It may not be of Maya origin.

ISHKAL (No. 7), S.P.I. No. 43602. Kekchí word, meaning "little girl." The avocado was so named because it was obtained through the aid of an Indian girl; it might be termed "the little girl's avocado."

COBAN (No. 8), S.P.I. No. 43932. Named for the town of Coban, capital of the department of Alta Vera Paz in northern Guatemala, where the parent tree is growing. Coban is one of the most important Indian towns of Guatemala.

KASHLAN (No. 10), S.P.I. No. 43934. A Kekchí word

meaning "foreign." The parent tree stood in the yard of one Diego Muus, an Indian of San Cristobal Verapaz. It was selected for propagation, and several visits were made to secure budwood. Because of this fact, the Muus family termed the tree the *kashlan oh* or "foreigner's avocado," and the name was adopted for the variety when it was introduced into the United States.

CHISOY (No. 11), S.P.I. No. 43935. The river Chisoy, an affluent of the great Usumacinta, flows close by the town of San Cristobal Verapaz, where this variety was secured.

PANKAY (No. 12), S.P.I. No. 44785. A coined word, from the locative prefix *pan* and the Kekchí word *kah* or *kay*, meaning "cold" - literally "place where it is cold." The name was applied to this variety because it came from an extremely cold region, that of Totonicapan, elevation 8,500 feet.

NABAL (No. 15), S.P.I. No. 44439. A Kekchí word (the dialect spoken in the Alta Vera Paz region), meaning "plenty, abundance." The variety was so named because the parent tree produced unusually large crops.

NIMLIOH (No. 17), S. P. I. No. 44440. A Kekchí phrase, meaning "large avocado." This variety is one of the largest secured in Guatemala.

PANCHOY (No. 18), S.P.I. No. 44625. A phrase from the Cakchikel dialect (spoken in the vicinity of Antigua), meaning "place where there is a lake." It is the name of the valley in which Antigua lies, and where the parent tree of the variety was found.

HUNAPUH (No. 19), S.P.I. No. 44628. One of the twenty Maya day names. In the Kiché dialect it means "the one Lord of Power."

TUMIN (No. 20), S.P.I. No. 44627. A Kekchí word, meaning "money." The variety was so named because it appeared to be a particularly valuable one.

BENIK (No. 21), S. P. I. No. 44626. One of the glyph signs from the Maya inscription. It is taken by Brinton, the well-known archaeologist, to mean "strength and deific power."

KEKCHI (No. 22), S.P.I. No. 44679. Name of one of the principal Maya tribes of the highlands of Guatemala. The variety was obtained in the territory occupied by this tribe.

MAYAPAN (No. 23), S.P.I. No. 44680. This was the name of an important Maya city. It means "place where there are Mayas."

KAYAB (No. 25), S.P.I. No. 44681. A Maya word,

meaning "tortoise." It was the name given to one of the nineteen months in the Maya calendar.

MANIK (No. 26), S.P.I. No. 45560. One of the twenty Maya day names. The hieroglyph which represents it shows a hand in the act of grasping.

CABNAL (No.27), S.P.I. No. 44782. Named for José Cabnal, a Kekchí Indian of Coban, who assisted in the work of securing these varieties in Guatemala.

CANTEL (No. 28), S.P.I. No. 44783. Named for the Finca Candelaria,a coffee plantation in Antigua where the parent tree was growing. "Cantel" is a corruption of this Spanish name, used by the Kekchí Indians of the Alta Vera Paz.

TERTOH (No. 30),S.P.I. No. 44856. A Kekchí word, meaning "expensive" or "costly." The variety was so named because its fruit sold in the market at a much higher price than that of any other grown in the same region. It is one of the largest fruited of the Guatemalan avocados.

NIMAH (No 31), S.P.I. No. 45078. A somewhat corrupted form of the Kekchí phrase *nim-li-ha*, meaning "large stream." The variety was so named because the parent tree stood close to the edge of a stream at Mazatenango.

AKBAL (No. 32), S. P. I. No. 45505. One of the twenty Maya day signs, meaning "night" or "darkness."

KAGUAH (No. 33), S. P. I. No. 45561. A word used by the Kekchí Indians, meaning "chief" or "master."

ISHIM (No. 34),S.P.I. No. 45562. This word means "corn" (*Zea mays*) in most of the Maya dialects. We have thought it appropriate to use it as a varietal name for one of the Guatemalan avocados,because the Guatemalan Indians consider this fruit as useful and valuable as corn, their great staple food crop.

KANAN (No. 35), S.P.I. No. 45563. A Maya word, meaning "yellow when ripe." The flesh of this variety is of a rich yellow color.

CHABIL (No. 36),S.P.I. No. 45564. A Kekchí word, meaning "pretty" or "beautiful." The fruit, though small, is unusually attractive in appearance.

RELEASE OF GUATEMALAN AVOCADOS.

The following note has been sent as a circular letter to all experimenters who received budwood or plants of avocados introduced from Guatemala during the years 1916-1917.

The restrictions placed upon the propagation and dissemination of the avocados introduced from Guatemala by this Department and assigned the following S.P.I. numbers are now removed, and you are at liberty to propagate the trees you have in your hands as you see fit:

Name	Popenoe's No.	S.P.I. No.
Itzamna	2	55736
Lamat	3	43476
Kanola	6	43560
Ishkal	7	43602
Coban	8	43932
Kashlan	10	43934
Chisoy	11	43935
Pankay	12	44785
Nabal	15	44439
Nimlioh	17	44440
Panchoy	18	44625
Tumin	20	44627
Benik	21	44626
Kekchi	22	44679
Mayapan	23	44680
Kayab	25	44681
Manik	26	45560
Cabnal	27	44782
Cantel	28	44783
Tertoh	30	44856
Akbal	32	45505
Ishim	34	45562
Kanan	35	45563
Chabil	36	45564

The Department wishes to have it understood, in making this release, that the varieties represented by the above numbers have not yet been tested a suf-

ficient length of time to demonstrate satisfactorily their commercial worth and adaptability, and therefore are not yet recommended by this Department for commercial cultivation. The purpose of this release, which is made at the request of the California Avocado Association and numerous individual growers, is to facilitate the distribution of the varieties and make possible wider and more effective trial than has yet been given them.

All of these varieties are described in Department Bulletin 743, "The Avocado in Guatemala," where also are published the names which have been given them. The Department desires that all of the varieties be propagated and disseminated under the names therein published, and will appreciate your cooperation to this effect.

The variety Itzamna was not distributed along with the others of the collection. At Miami, Florida, it has fruited for several seasons, and has proved to be later in ripening than most other Guatemalan sorts. Budwood of this variety can be supplied to those who desire to test it.

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BUREAU OF PLANT INDUSTRY
UNITED STATES DEPARTMENT OF AGRICULTURE

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